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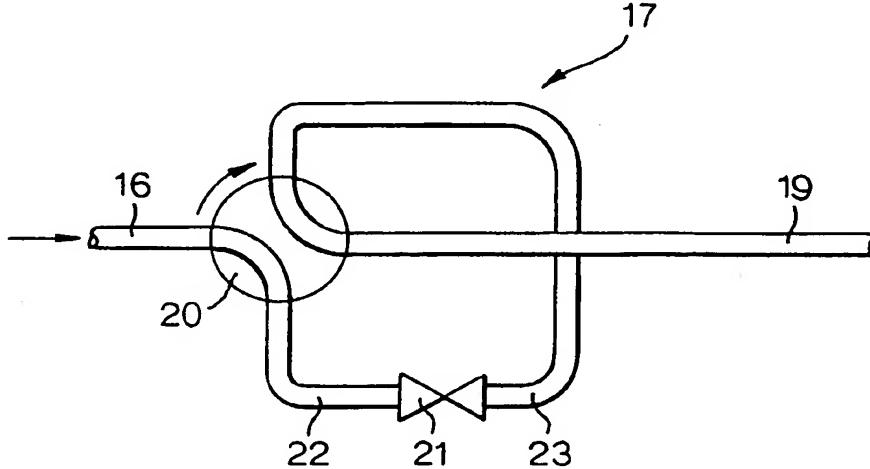
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CHOKE FOR CONTROLLING THE FLOW OF DRILLING MUD

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(57) Abstract: The invention relates to a drilling system and method for drilling a well bore into an earth formation, comprising:- drilling means for drilling a well bore;- pumping means for pumping drilling fluid into the well bore during drilling; and - a drilling fluid outlet system for retrieving drilling fluid from the well bore, said drilling fluid outlet system comprising choke means for choking the return flow of retrieved drilling fluid, and alternating means for alternating the flow direction through the choking means.

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**INTERNATIONAL SEARCH REPORT**

International Application No

PCT/EP 03/06750

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 E21B21/10 E21B21/08

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 E21B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category * | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|------------|---|-----------------------|
| A          | US 3 354 970 A (LUMMUS JAMES L)<br>28 November 1967 (1967-11-28)<br>column 1, line 60-70<br>column 4, line 17-19<br>figure 2<br>---                     | 1                     |
| A          | US 3 365 009 A (HALPAIN LUKE E ET AL)<br>23 January 1968 (1968-01-23)<br>column 1, line 38-45<br>column 4, line 71 -column 5, line 9<br>figure 2<br>--- | 1                     |
| A          | US 4 630 675 A (NEIPLING LAWRENCE E ET AL)<br>23 December 1986 (1986-12-23)<br>column 1, line 27-46<br>abstract<br>---<br>-/-                           | 1                     |

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Patent family members are listed in annex.

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| Date of the actual completion of the international search<br><br>19 September 2003   | Date of mailing of the international search report<br><br>07/10/2003 |
| Name and mailing address of the ISA<br><br>European Patent Office, P.B. 5818 Patentlaan 2<br>NL - 2280 HV Rijswijk<br>Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,<br>Fax: (+31-70) 340-3016 | Authorized officer<br><br>Schouten, A                                |

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International Application No

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|------------|---|-----------------------|
| A          | US 3 508 577 A (RANDALL BILLY V ET AL)<br>28 April 1970 (1970-04-28)<br>column 2, line 16-27<br>column 4, line 45-57<br>figure 2<br>--- | 1                     |
| A          | EP 0 947 750 A (CEMI PISCINE SERVICE S R<br>L) 6 October 1999 (1999-10-06)<br>figures 5,6<br>-----                                      | 1                     |

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 03/06750

| Patent document cited in search report |   | Publication date |                | Patent family member(s)                  |  | Publication date |
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| US 3354970                             | A | 28-11-1967       | NONE           |  |  |                  |
| US 3365009                             | A | 23-01-1968       | NONE           |  |  |                  |
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